

WHAT IS CLAIMED IS:

1. A computer-readable medium having computer-executable instructions, the instructions comprising:
 - (a) displaying a desktop on a display;
 - (b) displaying a map pane over a portion of the desktop, wherein the map pane includes an internal frame;
 - (c) increasing the opacity of the map pane in response to detecting a cursor over the map pane; and
 - (d) panning the desktop in response to detecting the cursor dragging the frame within the map pane.
2. The computer-readable medium of claim 1, wherein (a) comprises displaying a first portion of a virtual desktop, wherein (d) comprises displaying different a second portion of the virtual desktop, wherein the virtual desktop is larger than the first portion or second portion.
3. The computer-readable medium of claim 2, wherein the map pane comprises a scaled down image of the virtual desktop.

4. The computer-readable medium of claim 3, wherein the portion of the scaled image of the desktop within the frame in the map pane corresponds to the portion of the virtual desktop displayed on the screen.
5. The computer-readable medium of claim 2, further comprising:
moving the map pane to a different position on the desktop in response to the cursor dragging the map pane.
6. The computer-readable medium of claim 2, further comprising:
playing a sound in response to detecting a panning operation.
7. The computer-readable medium of claim 5, further comprising:
providing audio feedback in response to detecting the frame being dragged against the frame.
8. The computer-readable medium of claim 2, wherein the map pane acts as a bound on where the frame can be dragged.

9. The computer-readable medium of claim 2, wherein the desktop acts as a bound on where the map pane can be dragged.

10. The computer-readable medium of claim 2, further comprising:

wherein the map pane defaults to a predetermined position on the desktop.

11. The computer-readable medium of claim 2, further comprising:

displaying a task bar on the desktop, wherein the task bar acts as a bound on where the map pane can be dragged.

12. The computer-readable medium of claim 9, further comprising:

hiding the task bar when the cursor is not over the task bar;

displaying the task bar in response to the cursor floating in a particular region; and

moving the map pane to a new position to prevent the task bar from overlapping the map pane.

13. The computer-readable medium of claim 9, further comprising:

hiding the task bar when the cursor is not over the task bar;

displaying the task bar in response to the cursor floating in a particular region; and

displaying the map pane over the task bar if the task bar and map pane overlap.

14. The computer-readable medium of claim 9, further comprising:

storing per-user preferences for the location of the map pane.

15. The computer-readable medium of claim 2, wherein the map pane's position on the desktop is fixed and not changeable.

16. The computer-readable medium of claim 2, wherein the size of the map pane is adjustable by the user, wherein the frame size is adjusted to maintain a fixed ratio of the size of the map pane.

17. The computer-readable medium of claim 2, wherein the map pane provides a birds eye view of the virtual desktop.
18. The computer-readable medium of claim 2, wherein (d) comprises updating the desktop with different portions of the virtual desktop as the frame is dragged.
19. The computer-readable medium of claim 2, wherein (d) comprises waiting to update the desktop with a different portion of the virtual desktop until the frame dragging is completed.
20. The computer-readable medium of claim 2, wherein the map pane comprises a scaled down image of the virtual desktop, wherein the scaled down image of the virtual desktop is calculated once per screen refresh.
21. The computer-readable medium of claim 2, wherein the map pane comprises a scaled down image of the virtual desktop, wherein the scaled down image of

the virtual desktop is calculated at the end of each frame drag operation.

22. A computer-readable medium having computer-executable instructions, the instructions comprising:

(a) displaying a desktop on a display;
(b) in response to detecting a map pane display input signal from the user:

(1) displaying a map pane over a portion of the desktop, wherein the map pane includes an internal frame; and

(2) panning the desktop in response to detecting the cursor dragging the frame within the map pane;

(c) in response to detecting the end of the map pane display signal, hiding the map display pane.

23. The computer-readable medium of claim 22, wherein the map pane display signal is a key press and mouse click combination.

24. The computer-readable medium of claim 22, wherein the end of the map pane display signal is a key up or mouse up.

25. The computer-readable medium of claim 22, wherein the map pane display signal is a multiple concurrent key press combination.
26. The computer-readable medium of claim 23, wherein the map pane is displayed at a fixed location on the desktop.
27. The computer-readable medium of claim 23, wherein the map pane is displayed centered on the cursor position click location.
28. The computer-readable medium of claim 23, wherein a movement of the cursor during the display of the map pane drags the frame within the map pane.
29. computer-readable medium of claim 22, wherein displaying a map pane over a portion of the desktop comprises gradually increasing the opacity of the map pane
30. The computer-readable medium of claim 29, wherein (b) further comprises:

(3) panning the desktop in response to detecting the cursor dragging outside the map pane, wherein the panning of the desktop is in the direction of the cursor dragging movement.

31. The computer-readable medium of claim 23, wherein
(a) further comprises displaying the map pane in the center of the desktop.

32. A computer-readable medium having computer-executable instructions, the instructions comprising:

toggling between a first display state and a second display state in response to a zoom button press, wherein the first display state comprises displaying an entire desktop on a display, wherein the second display state comprises displaying a portion of the entire desktop on the display;

when in the second display state:

(a) in response to detecting a first pan button press, panning the desktop in a first direction;

(b) in response to detecting a second pan button press, panning the desktop in a second direction;

(c) in response to detecting a second pan button press, panning the desktop in a second direction; and

(d) in response to detecting a second pan button press, panning the desktop in a second direction.

33. The computer-readable medium of claim 32, wherein the first direction corresponds to the position of the first pan button relative to the display, wherein the second direction corresponds to the position of the second pan button relative to the display, wherein the third direction corresponds to the position of the third pan button relative to the display, wherein the fourth direction corresponds to the position of the fourth pan button relative to the display.

34. The computer-readable medium of claim 32, further comprising:

when in the second display state, selecting a centered portion of the entire desktop for display in response to the pressing of a center button.

35. The computer-readable medium of claim 32, further comprising:

when in the second display state, panning the desktop in response to the cursor being dragged while a pan button is pressed, wherein the panning occurs in same direction that the cursor is being dragged.

36. The computer-readable medium of claim 32, further comprising:

toggling between a first toolbar state and a second toolbar state, wherein the first toolbar state comprises a hidden toolbar, wherein the second toolbar state comprises a displayed toolbar.

37. The computer-readable medium of claim 36, wherein the displayed toolbar is displayed over the desktop in a partially transparent manner, and wherein the toolbar dimensions do not change when the display state changes from the first display state to the second display state.

38. The computer-readable medium of claim 36, wherein the toolbar is anchored to a user-specifiable edge of the display device, and wherein the toolbar is a task bar.

39. The computer-readable medium of claim 32, wherein the first direction is up, wherein the second direction is down, wherein the third direction is left, wherein the fourth direction is right.

40. The computer-readable medium of claim 39, further comprising:

(c) in response to detecting a fifth pan button press, panning the desktop in a fifth direction, wherein the fifth direction is diagonal corresponds to the position of the first pan button relative to the display.

41. The computer-readable medium of claim 32, wherein the first direction corresponds to the direction specified by a vector drawn from a first point at the approximate center of all the pan buttons to a second point at the first pan button.

42. A computer-readable medium having computer-executable instructions, the instructions comprising:

toggling between a first display state and a second display state in response to a zoom button press, wherein the first display state comprises displaying an entire desktop on a display, wherein the second display state comprises displaying a portion of the entire desktop on the display; and

when in the first display state, in response to detecting that the zoom button press is still pressed after a selected time interval:

(a) displaying a frame around the portion of the desktop that will be displayed in the second display state;

(b) in response to a mouse click, centering the frame around the cursor position;

(c) in response to a cursor drag, moving the frame in the direction of the cursor drag; and

(d) in response to detecting that the zoom button is no longer pressed, toggling to the second display state.

43. The computer-readable medium of claim 42, wherein the frame's movement is limited by the edges of the desktop.

44. The computer-readable medium of claim 42, further comprising, when in the first display state, in response to detecting that the zoom button press is still pressed after a selected time interval, changing the cursor.

45. The computer-readable medium of claim 42, further comprising performing a zooming operation to gradually scale and pan between the first display state and second display state.

46. A computer-readable medium having computer-executable instructions, the instructions comprising:

toggling between a first display state and a second display state in response to a zoom button press, wherein the first display state comprises displaying an entire desktop on a display, wherein the second display state comprises displaying a portion of the entire desktop on the display;

when in the second display state:

(a) in response to a pan button press and a cursor drag, panning the desktop in the direction of the cursor drag;

when in the first display state:

(a) in response to a pan button press:

(1) displaying a frame around the portion of the desktop that will be displayed in the second display state;

(2) in response to a mouse click, centering the frame around the cursor position;

(3) in response to a cursor drag, moving the frame in the direction of the cursor drag; and

(4) in response to detecting that the pan button is no longer pressed, toggling to the second display state.

47. The computer-readable medium of any of claims 1 through 46, wherein panning the desktop comprises shifting which portion of the entire desktop is displayed without changing which percentage of the entire desktop is displayed.

48. The computer-readable medium of any of claims 1 through 46, wherein zooming the desktop comprises changing which percentage of the entire desktop is displayed.